MEMORANDUM OF UNDERSTANDING BETWEEN THE STATE OF NORTH DAKOTA AND

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

The State of North Dakota (State) and the United States Environmental Protection Agency (EPA) enter into this memorandum of understanding (MOU) to identify a process for resolving several issues relating to the modeling protocol for the State's Prevention of Significant Deterioration (PSD) program.

Recitals

- 1. The State has an EPA-approved State Implementation Plan (SIP) under the Clean Air Act. (CAA) 40 C.F.R. Part 52, §§ 1820-1835. The State's SIP includes authority to administer the State's Prevention of Significant Deterioration (PSD) program, which was originally approved by EPA on May 26, 1977, (42 Fed. Reg. 26,977) and since then has been administered by the state under its SIP.
- 2. The State recently completed an 18-month long periodic review of its PSD program and determined that there are currently no PSD Class I sulfur dioxide increment violations occurring in North Dakota or Eastern Montana, and that the State's SIP is adequate to protect against air quality deterioration. September 8, 2003 Order of North Dakota State Health Officer Terry L. Dwelle, M.D. In January 2002, EPA prepared a "Draft Dispersion Modeling Analysis of PSD Class I Increment Consumption in North Dakota and Eastern Montana," which tentatively identified increment violations. Similarly, on May 23, 2003, EPA published a "Notice of Availability" of the May 2003 EPA Dispersion Modeling Analysis, which also tentatively identified increment violations. However, both EPA reports sought public comment and explained that they were not final agency determinations.
- 3. The State agrees to do draft alternative modeling based on the issues on which the State and EPA agree. By agreeing to do this draft modeling, the State and EPA agree that the State is neither re-opening its PSD periodic review determination, nor agreeing to waive or alter any of the legal or factual determinations the State made in that proceeding. EPA likewise is not agreeing to be bound by the draft modeling the State conducts under this MOU, but only to weigh the results in any decision it makes to either concur or not concur with the State's September 8, 2003 determination, or to revise, finalize, or not finalize the draft modeling EPA has published for public comment.

I. Issues of Agreement

The State and EPA agree that the State has the following discretion under the CAA and

its implementing rules, and that the State may choose these options in conducting the additional modeling it has agreed to do under this MOU:

- 1. The State may use versions of CALMET and CALPUFF acceptable under 40 C.F.R. Part 51, Appendix W, as amended at 68 Fed. Reg. 18440 (April 15, 2003).
- 2. When establishing the baseline emission inventory for sources existing on the minor source baseline date, the State may use the "actual emissions" from "a different time period" other than "a two-year period which precedes" the minor source baseline date upon a determination that the different time period "is more representative of normal source operation."
- 3. The State may use emission factors based on recent continuous emission monitoring (CEM) data to estimate baseline emissions for electric utilities if adjusted for the actual contents of the coal used in the baseline period and provided they are consistent with other data sources for the facility. The State agrees to use sulfur-content of the coal consumed during a unit's baseline normal source operations, rather than average life of mine sulfur content, in modeling conducted under this MOU.
- 4. Consistent with the CAA and promulgated EPA and North Dakota regulations. the State may use actual emissions as defined by rule in estimation procedures for short-term time periods for all sources.
- 5. The State may model the baseline emission inventory and the current emission inventory to determine estimated baseline concentrations and estimated current concentrations. This procedure may be used to determine estimated changes in contaminant concentration "over the baseline concentration" in the ambient air, and to assist in examining the correspondence between modeling and monitoring in any accuracy analysis. Alternatively, the State may model the ambient concentration change attributable to increment-affecting emissions.
- 6. The State may model five years of representative mesoscale meteorological data, such as National Weather Service (NWS) upper-air/hourly-surface data. Alternatively, the State may model three years of mesoscale meteorological data suitable for CALMET, such as advanced MM5 or Rapid Update Cycle data, as input data for the CALPUFF air quality model in conjunction with appropriate available standard NWS or comparable meteorological observations within and near the modeling domain. Processing of prognostic meteorological data sets must be made available to EPA.

II. Issues That Remain Unresolved

The State and EPA have not reached agreement on the following issues:

- Whether to include emissions of sources granted Federal Land Manger variances under CAA § 165 when determining consumption of the PSD Class I sulfur dioxide increment.
- 2. Whether the specific alternative method of calculating air quality deterioration and PSD increment consumption from model outputs as used by the State is consistent with the CAA and promulgated EPA regulations.

The Parties will continue to evaluate these issues, and continue to engage in a technical dialogue to resolve them. The State is not waiving its determination on these issues in its periodic review by agreeing to do draft modeling for PSD compliance based only on the Issues of Agreement summarized in subdivision I above. Without waiving its position on these two issues, the State agrees to do draft modeling contemplated by this MOU, consistent with EPA's position on these two issues, and draft modeling consistent with the State's position on these two issues.

III. Process and Timetables

The State and EPA further agree:

- In order to conduct the draft modeling identified by this MOU, the State will propose a draft alternative modeling protocol for EPA's comment and review no later than 15 days after this MOU's execution. EPA will review and provide written comment to this proposed modeling protocol within 30 days following receipt of the alternative modeling protocol. The State will finalize this modeling protocol for draft modeling, consistent with this MOU no later than 45 days following receipt of EPA's comments.
- 2. The State will conduct a draft modeling run, based upon the alternative modeling protocol, no later than 75 days after the finalized protocol is received by FPA. By doing this draft modeling, the State is not re-opening its PSD periodic review determination, or waiving any of the legal or factual determinations the State made in that proceeding. Nor is EPA agreeing to be bound by the modeling the State conducts under this MOU, but only to weigh the results.
- 3. Air quality monitoring data is a significant indicator of air quality in Class I and Class II areas and will be used to evaluate the draft modeling results and to guide any adjustments in the modeling protocol if appropriate, so that modeling results are consistent with that data.
- 4. Any federally enforceable future reductions in emissions may be considered in the modeling to determine future compliance. The modeling protocol may model

possible future reductions to measure PSD increment compliance if such reductions are made federally enforceable.

- To work in good faith (a) to achieve the goals and timetables agreed to in this 5. MOU, (b) to preserve and protect the existing air quality of the State, including its Class I areas, and (c) to provide increased regulatory certainty to existing and future permitted facilities.
- The State or the EPA may terminate this MOU without prior notice or cause by 6. providing written notice to the other of its intent to terminate.

Michael O. Leavitt

Administrator, EPA

Governor, State of North Dakota